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PATENT

13561US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Scaringe, S. Examiner: To be assigned  
 Serial No.: 10/635,108 Group Art Unit: To be assigned  
 Filed: August 5, 2003  
 For: "Short Interfering RNAs having a Hairpin Structure Containing A Non-Nucleotide Loop"

Customer No.: **23719**

PATENT TRADEMARK OFFICE

Kalow & Springut LLP  
 488 Madison Avenue, 19th Floor  
 New York, New York 10022

December 4, 2003

Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Applicants submit herewith the following disclosure in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98.

**I. UNITED STATES PUBLICATION**

<b><u>Publication No.</u></b>	<b><u>Publication Date</u></b>	<b><u>Title</u></b>
US 2002/0086356 A1	July 4, 2002	RNA sequence-specific mediators of RNA Interference

**II. FOREIGN PATENT DOCUMENTS**

<b><u>Publication No.</u></b>	<b><u>Country</u></b>	<b><u>Publication Date</u></b>
WO 01/75164 A2	WIPO	11 October 2001
WO 02/44321 A2	WIPO	6 June 2002
WO 01/36646 A1	WIPO	25 May 2001

**Certificate of Mailing Under 37 C.F.R. 1.8**

I hereby certify that this correspondence is being deposited on the date shown below with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Viola Hyland  
 (Signature)

Viola Hyland  
 (Printed Name of Person Signing Certificate)

Dec. 4, 2003  
 (Date)

DE 101 00 586 C1  
WO 01/29058 A1

German  
WIPO

11 April 2002  
26 April 2001

### III. DOCUMENTS

“RNA interference,” “Ribopharma AG” pp. 1-5, [http://www.ribopharma.de/en/rna/rna\\_fr.html](http://www.ribopharma.de/en/rna/rna_fr.html), visited July 12, 2002.

Bernstein, Emily *et al.*, “The rest is silence,” *RNA* (2001) 7:1509-1521, Cambridge University Press, © 2001, RNA Society.

Press Release, “The World’s first patent in the application of RNA interference” Ribopharma AG, pp.1-2, [http://www.ribopharma.de/en/news/press/20020527/press\\_fr.html](http://www.ribopharma.de/en/news/press/20020527/press_fr.html), May 23, 2002.

Bosher, Julia M. *et al.*, “RNA interference: genetic wand and genetic watchdog,” *Nature Cell Biology*, Vol. 2, February 2000, pp.E31-E36.

Brummelkamp, Thijn R. *et al.*, “A System for Stable Expression of Short Interfering RNAs in Mammalian Cells,” *Science*, Vol. 296, April 19, 2002, pp. 550-553.

“Double-Stranded RNA Interference with Gene Expression: RNAi,” pp. 1-2 <http://avery.rutgers.edu/WSSP/StudentScholars/project/introduction/RNAi.html>, visited July 10, 2002.

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Ambion “Technical Bulletin 503, Selected RNA Interference (RNAi) References,” pp. 1-5 <http://www.ambion.com/techlib/tb/tb>, visited July 11, 2002.

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Information Disclosure Statement – Page 3

Elbashir, Sayda M. *et al.*, “Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells,” *Nature*, Vol. 411, May 24, 2001, pp. 494-498.

McManus, Michael T. *et al.*, “Gene silencing using micro-RNA designed hairpins,” *RNA* (2002), 8:842-850, Cambridge University Press, © 2002 RNA Society.

Paddison, Patrick J. *et al.*, “Short Hairpin RNAs (shRNAs) induce sequence-specific silencing in mammalian cells,” *Genes & Development*, 16:948-958 © 2002 by Cold Spring Harbor Laboratory Press.

Sharp, Phillip A., “RNA interference—2001.” *Genes & Development*, 15:485-490 © 2001 Cold Spring Harbor Laboratory Press.

Turner, Dave *et al.*, “mU6pro vector and hairpin siRNA cloning notes Turner lab; (with corrected Bbs1 site sequence),” pp. 1-4, <http://www.pnas.org/cgi/content/abstract/092143499v1>. updated May 17, 2002.

Tuschl *et al.*, “Research Summary, RNA interference and translational control,” pp. 1-4 [http://www.mpibpc.gwdg.de/abteilungen/100/105/project\\_u.html](http://www.mpibpc.gwdg.de/abteilungen/100/105/project_u.html), visited July 11, 2002.

Tuschl *et al.*, “The siRNA user guide,” “Selection of SiRNA duplexes from the target mRNA sequence,” pp. 1-6, [http://www.mppibpc.gwdg.de/abteilungen/100/105/sirna\\_u.html](http://www.mppibpc.gwdg.de/abteilungen/100/105/sirna_u.html), visited July 11, 2002.

Vaucheret, Hervé *et al.*, “Post-transcriptional gene silencing in plants,” *Journal of Cell Science*, 114:3083-3091 (2001) © The Company of Biologists Ltd.

Yu, Jenn-Yah *et al.*, “RNA interference by expression of short-interfering RNAs and hairpin RNAs in mammalian cells,” *PNAS*, April 30, 2002, vol. 99, No. 9, pp. 6047-6052.

Zamore, Philip D., “RNA interference: listening to the sound of silence,” *Nature Structural Biology*, Vol. 8, No. 9, Sept. 2001, pp. 746-750.

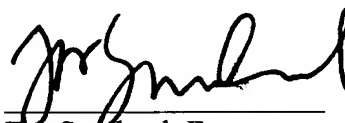
The items listed above are identified on the accompanying Form PTO 1449. A copy of each of the items identified above is also submitted with this statement.

Applicant: Scaringe.  
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Applicants take no position on whether any of the items cited above and listed on the accompanying Form PTO 1449 constitute prior art against the subject application under any particular provision of Title 35 of the United States Code.

Because no action has been taken on the merits, Applicants submit that no fee is due at this time. However, if a fee is deemed necessary, please charge Deposit Account No. 11-0171.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Tor Smeland', written over a horizontal line.

Tor Smeland, Esq.  
Registration No.: 43,131  
Attorney for Applicant

Kalow & Springut LLP  
(212) 813-1600

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

13561

Application Number

10/635,108

Applicant(s)

Scaringe, S.

Filing Date

August 5, 2003

Group Art Unit

To be Assigned

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		US2002/0086356 A1	07/04/02	Tuschl, Thomas <i>et al.</i>			03/30/01

## FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		WO 01/75164 A2	10/11/01	WIPO				
		WO 02/44321 A2	06/06/02	WIPO				
		WO 01/36646 A1	05/25/01	WIPO				
		DE 101 00 586 C1	04/11/02	Germany				
		WO 01/29058 A1	04/26/01	WIPO				

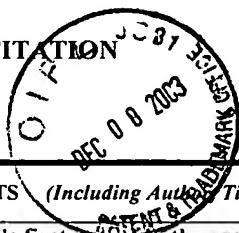
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		"RNA interference," "Ribopharma AG" pp. 1-5, <a href="http://www.ribopharma.de/en/rna/rna_fr.html">http://www.ribopharma.de/en/rna/rna_fr.html</a> , visited July 12, 2002.
		Bernstein, Emily et al., "The rest is silence," "RNA (2001) 7:1509-1521, Cambridge University Press, © 2001, RNA Society.

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Press Release, "The World's first patent in the application of RNA interference" Ribopharma AG, pp.1-2, <a href="http://www.ribopharma.de/eu/news/press/20020527/press_fr.html">http://www.ribopharma.de/eu/news/press/20020527/press_fr.html</a> , May 23, 2002.
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	Brummelkamp, Thijn R. et al, "A System for Stable Expression of Short Interfering RNAs in Mammalian Cells," Science, Vol. 296, April 19, 2002, pp. 550-553
	Double-Stranded RNA Interference with Gene Expression: RNAi," pp. 1-2 <a href="http://avery.rutgers.edu/WSSP/StudentScholars/project/introduction/RNAi.html">http://avery.rutgers.edu/WSSP/StudentScholars/project/introduction/RNAi.html</a> , visited, July 10, 2002
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Turner, Dave et al., "mU6pro vector and hairpin siRNA cloning notes Turner lab; (with corrected Bbs1 site sequence)," pp. 1-4, <http://www.pnas.org/cgi/content/abstract/092143499v1>. updated May 17, 2002

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